

JOB 012215
ALMA – BELLA VISTA BYPASS (SIGNING) (S)
OCTOBER 24, 2018

Question:

In the quantities for this project on sheet 13, wire rope safety fence anchors are listed. They are not in the job notice or the bid proposal document. Will these be added as a separate pay item?

Answer:

The plans will be revised to include quantities and a Special Provision for the pay item "Wire Rope Safety Fence End Terminals" and the information regarding Wire Rope Safety Fence anchors will be removed from the project. An addendum will be issued.

Question:

The SOW stipulates that the material meet AASHTO standard. That standard is for roads, bridges, overhead signs, etc. The standard that covers Communication Structures is ANSI/TIA-222. The material requirements of these two standards are different. We use steel that is pre-qualified per TIA-222 as well as the AISC steel manual. With that being said, I request that we are allowed to use the following steel grades, per ANSI/TIA 222-H.

Angles: ASTM A36 (Fy = 36,000 psi)

Solid Round Rod: ASTM A572-50 (Fy = 50,000 psi)

Plate: ASTM A36 (Fy = 36,000 psi)

ASTM A572-50 (Fy = 50,000 psi)

AASHTO m270/ASTM A709 is bridge steel. A572 and A36 are building steel. A572 is chemically equivalent to ASTM A709. A709 just requires what is called "Charpy" testing, and hence is more expensive. TIA 222 is adopted by IBC 2012 and IBC 2012 is adopted by the state of Arkansas. I request that we are approved to provide tower designs that meet TIA 222.

Answer:

Subject to approval by the Engineer, ASTM A709/A36/A572 steel materials otherwise in accordance with Section 807 of the Standard Specifications and the Special Provision may be substituted for AASHTO M270 materials called for in the Special Provision. Any variation from plan documents shall be noted in the shop drawings and submitted to the Engineer

prior to shop drawing approval. Please note per Special Provision Antenna Support Structure Assembly, all main load carrying tension members greater than ½" in thickness shall conform to the requirements of the Longitudinal Charpy V-notch test specified for Zone I minimum service temperature.

Per the Special Provision, the design specification is the latest version of the ANSI/TIA/EIA-222 Structural Standards for Steel Antenna Towers and Antenna Supporting Structures. The required equipment and its associated dimensions and loadings should be provided by the Maintenance ITS staff. Design submittals and shop drawings shall be in accordance with the Special Provision.

Question:

There is no requested loading (antennas, dishes, cameras, feedlines, powerlines, mounts, etc.) listed in the documents. Please verify the loading these towers must support.

Answer:

The Contractor shall be able to determine the loading for tower for this job based on the quantities table on sheet number 157 of the plans. See the list below for calculations:

- 1 The two radios are IsoStation-5AC and PrismStation AC by Ubiquiti (Calculation shall be based on the heavier model)
- 2 Axis 5635-E Mark II cameras, manufactured by Axis Communications
3. 2 Climbers with 50 lbs of tools and gears for each climber.
4. Cables, brackets, mounts, accessories and other parts for the above list shall be included in the calculations.

Question:

Are all the tilt tower sites & service points on the State's right of way and reachable by a road vehicle without crossing private property?

Answer:

Tilt towers site: Yes

Service points site: The Contractor shall be responsible for locating the nearest electrical power source and connect the source to the appropriate terminations. The Contractor shall cooperate with the local electrical utilities to establish service accounts at the direction of the Engineer. Contractor shall provide as part of the contract secondary Breaker, conduit, wire and wiring to the main breaker.

Contractor shall refer to Service Point assembly SP, Service Point Standard Drawing SD-9, notes and drawings on Tilt Tower sheet and sheets on the plans for this job for more details.

Question:

What is the lead time on the cameras and radios supplied by ARDOT?

Answer:

Contractor shall submit a written "Equipment Pickup Request" to the Job Engineer and ITS Management Section 2-weeks prior to picking up the equipment from Maintenance Division building in Little Rock.

The 2-weeks time period will be used to configure the settings for the requested equipment. Each request shall not exceed the quantity of more than 40 equipment. Not more than 2 requests shall be submitted within the same 2-weeks time period.

Question:

What tilt towers foundation will be used if ground conditions prevent the use of the Helical Screw type foundation?

Answer:

The Contractor shall consult with the tilt tower manufacture for the appropriate foundation for the soil type. The contractor shall obtain and follow the instructions of the tilt tower manufacture to install the foundation and tilt tower accordingly. Documentations of the tilt tower manufacture instruction will be required and shall be provided by the Contractor to the Engineer. The Foundation will need be approved by the Engineer.

Question:

Section 2C of the attached special provisions calls for the batteries to provide 12 hours of full run time. What is the load expected for the 12 hours?

Answer:

The Contractor shall be able to determine the power load for each location for this job based on the quantities table on sheet number 157 of the plans. See the list below for calculations:

- a) The two radios are IsoStation-5AC and PrismStation AC by Ubiquiti (Calculation shall be based on the model with the max power draw)
- b) Axis 5635-E Mark II cameras, manufactured by Axis Communications

c) At least 1 Ubiquiti TOUGHSwitch PoE- the model that draws the max power of the followings models: TOUGHSwitch PoE TS-5-POE, TOUGHSwitch PoE TS-8 PRO, TOUGHSwitch PoE TS-16- CARRIER

d) For Overhead DMS/VMS: Contractor shall review the Overhead Dynamic Message Sign Assembly SP for more details.

Question:

Would the Department consider revising the specifications for the hardware?

Answer:

The Department will not be revising the hardware specifications.

Question:

Pay item "SP-DRILLED SHAFT (30" DIAMETER)" Reads in the SP – Basis of Payment Drilled shafts, measured as provided above, will be paid for at the contract unit price bid per linear foot for "Drilled Shaft (48" Dia.)" which shall be full compensation....

Also is there to be a pay item for "PERMANENT STEEL CASING"? In the same SP reads Permanent casing will be paid for at the contract unit price bid per linear foot for "Permanent Steel Casing (54" Dia.)" which shall be full compensation for furnishing and placing the casing above the costs attributed to the work paid for under associated pay items.

My question is what size is the Drilled Shaft? And should there be a pay item for ____" Diameter Permanent Steel Casing?

Answer:

The size of the Drilled Shaft will be based on the specifications in ANTENNA SUPPORT STRUCTURE ASSEMBLY SP.

The Design Specifications provided by the supplier/manufacture shall include; plans, shop drawings and design calculations provided and stamped by a Professional Engineer Licensed in Arkansas as specified in ANTENNA SUPPORT STRUCTURE ASSEMBLY SP. See below and refer to SP for more details;

No, this part is covered by the ANTENNA SUPPORT STRUCTURE ASSEMBLY SP. Refer to SP for more details.

Also, steel casings (temporary or permanent), oversized surface casings, materials, labor and equipment required to accomplish the work described herein shall be in the price bid for the pay item under this special provision.

Question:

Moreover, are the " ANTENNA SUPPORT STRUCTURE ASSEMBLY's" foundations to paid within its SP or under the "SP-DRILLED SHAFT"?

Answer:

The foundation for ANTENNA SUPPORT STRUCTURE ASSEMBLY shall be paid for under the ANTENNA SUPPORT STRUCTURE ASSEMBLY SP.

Contractor shall review Antenna Support Structure assembly for more details.

Question:

Pay item "CONCRETE PULL BOX (TYPE 2 HD) - QTY (4)"

Is there to be a pull box at each of the (29) "TILTTOWER 40'" and the (11) "ANTENNA SUPPORT STRUCTURE ASSEMBLY"?

Answer:

If it has utility power then yes. Contractor shall refer to plans (look in sheet # 161 & 162) for more details.

Question:

Is the "SERVICE POINT ASSEMBLY" for the (7)"OVERHEAD DMS ASSEMBLY" to be include in the the bid price or paid separate in the "SERVICE POINT ASSEMBLY" pay item?

Answer:

Overhead Dynamic Message Sign Assembly. Page 18 of 24. Section D. 2.

The Contractor shall be responsible for locating the nearest electrical power sources and connecting those sources to the appropriate terminations with the LED DMS. The Contractor shall cooperate with the local electrical and telephone utilities to establish a service accounts at the direction of the Engineer. Service point assembly, conductors, poles, conduit, connectors, and all associated equipment for a fully functioning power center shall be considered subsidiary to the cost of the Service Point Assembly.

Question:

Reference is made the question on Page 2 above. The response to the question does not tell the size/dimensions of the loading, the positioning on the tower(s), and the size of the cabling.

Answer:

The size/dimensions should be determined by Vendor based on the information provided in previous answer.

For the position of the equipment; the equipment shall be installed as described by "ITS equipment installation" SP. The equipment should be positioned on the top 3ft of towers or as directed by the Engineer. If the top 3ft of tower is filled with ITS equipment then the contractor will be allowed to use the 2ft below the top 3ft to position the rest of the ITS equipment.

Note: Shireen's DC-1021 high quality outdoor shielded FTP (Foil Twisted Pair) CAT5e cable will be used to power/connect the ITS equipment to the cabinet located at each site. This item shall be included in the calculations.